SAFETY DATA SHEET
ANTIMONY TRIOXIDE

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name
ANTIMONY TRIOXIDE

CAS-No.
1309-64-4

EU Index No.
051-005-00-X

EC No.
215-175-0

1.2. Relevant identified uses of the substance or mixture and uses advised against

Uses advised against
None known.

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards
Not classified.

Human health
Carc. 2 - H351

Environment
Not classified.

Classification (67/548/EEC)
Carc. Cat. 3; R40

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.
2.2. Label elements

EC No. 215-175-0

Label In Accordance With (EC) No. 1272/2008

Signal Word Warning

Hazard Statements H351 Suspected of causing cancer by inhalation.

Precautionary Statements

P202 Do not handle until all safety precautions have been read and understood.
P281 Use personal protective equipment as required.
P308+313 IF exposed or concerned: Get medical advice/attention.
P405 Store locked up.
P501 Dispose of contents/container in accordance with regional regulations.

Supplementary Precautionary Statements

P201 Obtain special instructions before use.

2.3. Other hazards

Not Classified as PBT/vPvB by current EU criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Product name ANTIMONY TRIOXIDE

CAS-No. 1309-64-4

EU Index No. 051-005-00-X

EC No. 215-175-0
SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation
Move the exposed person to fresh air at once. Keep the affected person warm and at rest. Get prompt medical attention.

Ingestion
DO NOT INDUCE VOMITING! Drink plenty of water. Get medical attention immediately!

Skin contact
Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.

Eye contact
Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

4.2. Most important symptoms and effects, both acute and delayed

General information
No information available.

4.3. Indication of any immediate medical attention and special treatment needed

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media
Use: Carbon dioxide or dry powder. Water spray, fog or mist. Foam.

Unsuitable extinguishing media
None.

5.2. Special hazards arising from the substance or mixture

Unusual Fire & Explosion Hazards
The product is non-combustible.

Specific hazards Powder, dust
5.3. Advice for firefighters

Special Fire Fighting Procedures

Containers close to fire should be removed or cooled with water.

Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Avoid inhalation of dust and vapours. Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Do not discharge into drains, water courses or onto the ground. Collect and dispose of spillage as indicated in section 13.

6.3. Methods and material for containment and cleaning up

Avoid generation and spreading of dust. Collect powder using special dust vacuum cleaner with particle filter or carefully sweep into closed container. Flush with plenty of water to clean spillage area. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

6.4. Reference to other sections

For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level. Do not handle until all safety precautions have been read and understood. Wear protective clothing as described in Section 8 of this safety data sheet. Observe good chemical hygiene practices.

7.2. Conditions for safe storage, including any incompatibilities

Protect from light, including direct sunrays. Store in tightly closed original container in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.
SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

<table>
<thead>
<tr>
<th>Name</th>
<th>STD</th>
<th>TWA-8 Hrs</th>
<th>STEL – 15 min</th>
<th>Notes</th>
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<tbody>
<tr>
<td>ANTIMONY TRIOXIDE</td>
<td>WEL</td>
<td>0.5 mg/m³</td>
<td></td>
<td>As Sb</td>
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</table>

WEL = Workplace Exposure Limit.

Ingredient Comments

No exposure limits noted for ingredient(s).

DNEL

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<th>Long Term</th>
<th>Systemic Effects</th>
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<th>mg/kg/day</th>
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<tbody>
<tr>
<td>Dermal</td>
<td>Long Term</td>
<td>Local Effects</td>
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<td>mg/m³</td>
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</table>

PNEC

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>mg/l</th>
<th>mg/kg</th>
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<tbody>
<tr>
<td>Freshwater</td>
<td>0.113</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marineater</td>
<td>0.0113</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sediment (Freshwater)</td>
<td>7.8</td>
<td>mg/kg</td>
<td></td>
</tr>
<tr>
<td>Sediment (Marineater)</td>
<td>1.56</td>
<td>mg/kg</td>
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</tr>
<tr>
<td>Soil</td>
<td>37</td>
<td>mg/kg</td>
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<tr>
<td>STP</td>
<td>2.55</td>
<td>mg/l</td>
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</table>

The units are expressed in 'mg/μg' of: Antimony. Soil & sediment PNEC values are mg/kg wet weight.

8.2. Exposure controls

Protective equipment

Engineering measures

Provide adequate general and local exhaust ventilation.

Respiratory equipment

If ventilation is insufficient, suitable respiratory protection must be provided.
Hand protection

Use protective gloves. Impermeable material.

Eye protection

Use eye protection. Recommended: EN 166.

Other Protection

Provide eyewash station and safety shower. Hygiene measures DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

Skin protection

Wear rubber footwear. Wear appropriate clothing to prevent reasonably probable skin contact.

Thermal hazards None known.

Environmental Exposure Controls

Avoid releasing to the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance

Powder, dust

Colour

White

Odour

Odourless.

Solubility

Insoluble in water Soluble in: Alkalis. Hydrochloric acid (HCl).

Initial boiling point and boiling range

1425°C

Melting point (°C)

656°C

Relative density

5.897 (20°C)

Bulk Density

5.2 kg/m3

Vapour pressure

133 Pa (574°C)

Partition Coefficient (N-Octanol/Water)

Not Applicable - Inorganic chemical.
Explosive properties

Not explosive.

Other Flammability

The product is non-combustible.

Oxidising properties

Does not meet the criteria for oxidising.

9.2. Other information

Not available.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No information available.

10.2. Chemical stability

Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions

No information available.

10.4. Conditions to avoid

Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials


10.6. Hazardous decomposition products

When heated, vapours/gases hazardous to health may be formed.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological information

Oral absorption: 1% (ECB 2008).
Dermal absorption: 0.26% (negligible, ECB 2008).

Inhalation absorption: 6.82% (ECB 2008).

Carcinogenicity:

Carcinogenicity -

May cause cancer by inhalation.

REACH dossier information

Suspected carcinogen based on limited evidence.

Target organ for carcinogenicity

Respiratory system, lungs

Inhalation

Harmful: possible risk of irreversible effects through inhalation.

Ingestion

May cause discomfort if swallowed.

Skin contact

Irritating to skin.

Eye contact

Irritation of eyes and mucous membranes.

Route of entry

Inhalation. Skin and/or eye contact.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

12.1. Toxicity

<table>
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<tr>
<th>Test</th>
<th>Concentration (mg/l)</th>
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<tbody>
<tr>
<td>LC 50, 96 Hrs, Fish</td>
<td>&gt;530 (Bluegill Sunfish)</td>
</tr>
<tr>
<td>EC 50, 48 Hrs, Daphnia</td>
<td>&gt;1000</td>
</tr>
<tr>
<td>IC 50, 72 Hrs, Algae</td>
<td>67</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability
Degradability

The product is not biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential

Not Classified as PBT/vPvB by current EU criteria.

Bioaccumulation factor

BCF 40

Partition coefficient

Not Applicable - Inorganic chemical.

12.4. Mobility in soil

Mobility:

Not known.

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

General information Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements. Contaminated containers and packaging of dangerous substances or preparations must be treated in the same manner as the actual products contained in them.

SECTION 14: TRANSPORT INFORMATION

General The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number

Not applicable.

14.2. UN proper shipping name
14.3. Transport hazard class(es)

Not applicable.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Guidance Notes Workplace Exposure Limits EH40.

EU Legislation


Water hazard classification

WGK 1

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.